

Request # 8 H2S



6515 S. Jackrabbit Trail Buckeye, AZ 85326

Hydrogen Sulfide SOP

Scope

- Procedure applies to all Hickman's Family Farms properties, is to ensure property has less than 0.030 PPM of Hydrogen Sulfide

Responsibility

- It is the responsibility of the Food Safety Analyst to coordinate this procedure. The Food Safety Analyst will ensure Compliance Manager and necessary members of upper management are notified of higher levels of Hydrogen Sulfide are obtained.

Frequency

- Sampling will occur monthly
- After three (3) smell complaints are received from governing body (Arizona Department of Air Quality or Maricopa County)

Procedure

- The day before sampling, the Jerome 631-X will be plugged in to charge the battery
- The day of testing, the Jerome 631-X will be zeroed and put through "Regen" (Regen is Cleaning of filters)
- Wait a half hour to allow the internal filters to cool down
- At sampling site- double check that the meter is still zeroed, by pressing zero
- Press sample, record results on Results paper
- After all results are obtained, record results in the file named 2014 Gas, 2015 Gas, and 2016 Gas
- If results are for a 30 minute average, record results in the file named 30 Min Avg. 2015
- Annually the meter is sent into Arizona Instrument LLC for recalibration and servicing

Corrective Action

In the event that a sampling is out of compliance, the Food Safety analyst will resample a half hour later. If the retest comes back above compliant levels, the VP of Operations, Billy Hickman will be called and briefed of the situation. Arizona Department of Environmental Quality will be notified and a compliance plan will be submitted within one business week. The compliance plan will include:

- Technological Evaluations of additional odor control alternatives at the plant
- Additional monitoring and/or air dispersion modeling to determine property line concentration of hydrogen sulfide based on the implementation of selected odor control alternatives
- Conceptual design and preliminary cost estimate for the proposed odor control alternatives
- Schedule for design and construction of the proposed odor control alternatives
- Description of recommended actions

Records

- 2014 Gas, 2015 Gas
- 2016 Gas
- 30 Min Avg. 2015

Reference Material

- Air Quality Permit to Operate and/or Construct
-Permit number 040136 and 140062

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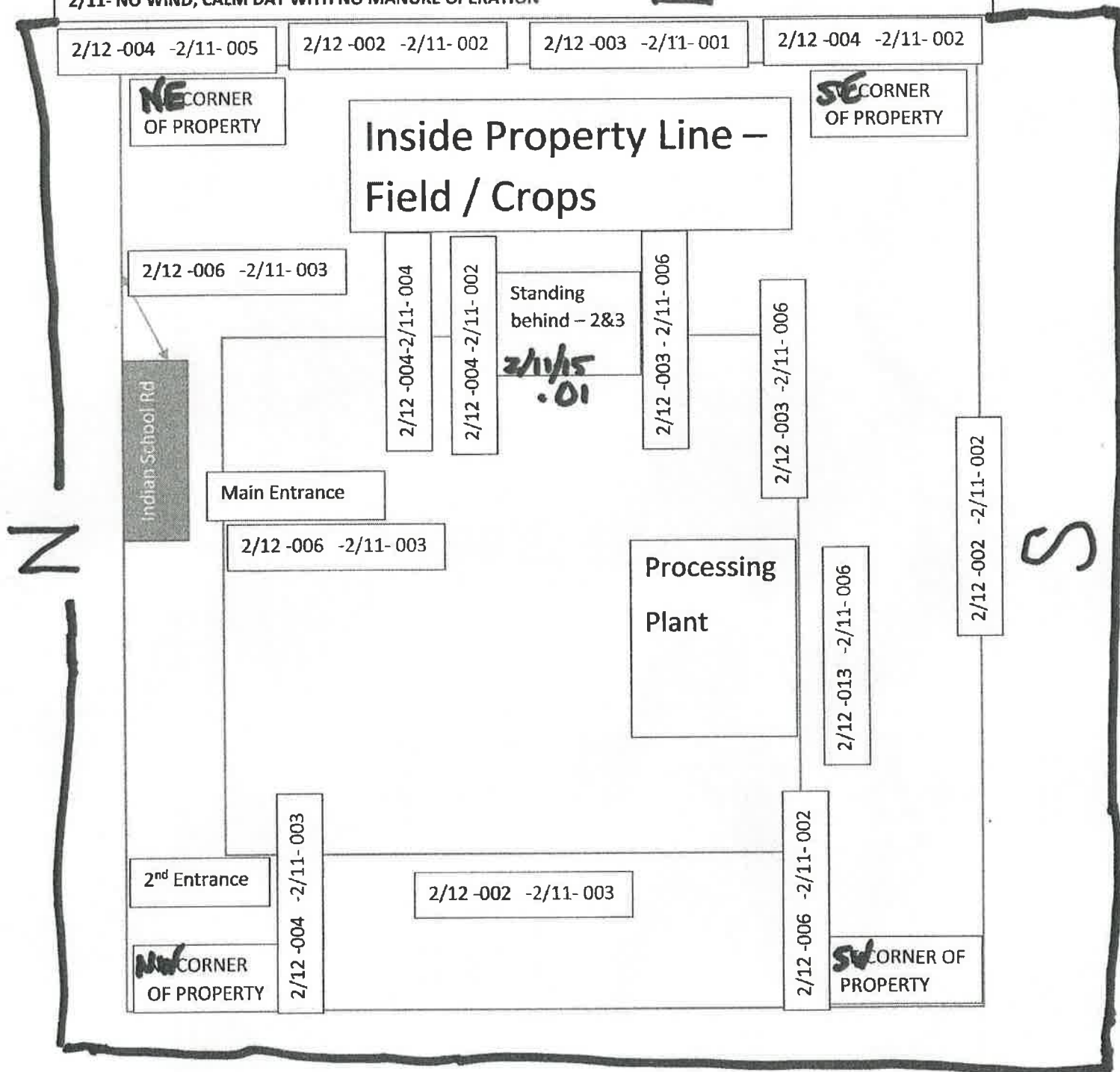
INITIAL READING FOR HYDROGEN SULFIDE IN ACCORDANCE WITH THE MARICOPA COUNTY AIR PERMIT -

This is a guide site map is NOT to scale - Maricopa Operation Permit Requires readings of <030 ^{ON Property}

2/12 - NE Prevailing WINDS WITH MANURE BELT OPERATIONS ACTIVE

2/11- NO WIND, CALM DAY WITH NO MANURE OPERATION

2030 Line



* All readings are done in the presence of Maricopa County representative.



Light Density & Ammonia Level Verification Policy

Barn Manager will verify that the Light density and Ammonia Levels meet all regulations and standards with light and ammonia meter at least once per month. Compliance Associate

Light Density:

1. Light intensity must be at least 0.5 foot candle at feeders. We use special LED lighting and have found that by having higher measurements with these lights have not caused any negative results or increased mortality.

2. Sufficient lighting must be provided to allow for effective inspection of all Layer Hens at least once daily.

Ammonia Levels:

1. Housing must allow Layer Hens to maintain their normal body temperature without difficulty.

2. Houses must be designed and operated so that a continuous flow of fresh air is provided for every bird. Sufficient ventilation must be maintained at all times to avoid excessive concentrations of carbon monoxide, methane, ammonia, hydrogen sulfide and dust.

3. The ammonia concentration to which Layer Hens are exposed should ideally be less than 10ppm and should rarely exceed 25ppm.

Request #8 Ammonia

	Barn 1	Barn 2	Barn 3	Barn 4	Barn 5	Barn 6	Barn 7	Barn 8	Barn 9
Is the water and feed logs current and accessible?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are pest control devices properly installed and monitored frequently?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Is rodent control logged and current?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are dead birds pulled from cages daily?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are floors swept and cleared of all egg spills and dead birds	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are cool cells working?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are egg belts aligned and rolling properly?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are front and back of barns clean and clear of clutter, debris and manure?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are manure belts cleaned daily?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are cobwebs wiped down and kept at a minimum?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are light bulbs working and wiped clean?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are there feed spills or jams?	N	N	N	N	N	N	N	N	N
Are employee safety precautions in place?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are footbaths installed and maintained?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are disinfection logs implemented	Y	Y	Y	Y	Y	Y	Y	Y	Y
Is code of conduct documents accessible?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are swabbing logs current and up to date?	Y	Y	Y	Y	Y	Y	Y	Y	Y
Light Readings	1.56	1.6	1.75	1.65	1.85	1.22	1.3	1.62	2
Ammonia Readings	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm	0 ppm

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Date: 2/15/2016
 Time: 7:00 AM
 Verified by: Kevin Whitehurst

Kevin Whitehurst
 Kevin Whitehurst, Hickman's Family Farms Food Safety Analyst